1   1.   (Currently Amended) [[A]] <u>The</u> computer system <u>of claim 75</u> ~~to provide one or~~

2   ~~more product selections to a user in accordance with product related data provided by the user,~~

3   ~~the computer system comprising:~~ <u>wherein the memory includes a database to store the products</u>

4   <u>as product configuration information and the product features comprise product attributes,</u> ~~a~~

5   ~~database storing product configuration information,~~ wherein the product configuration

6   information comprises product identifier information corresponding to product attribute

7   information for <u>the</u> multiple product configurations <u>and the code comprises:</u> [[;]]

8   ~~a memory;~~

9   ~~a processor coupled to the memory and the database;~~

10   a data receiving module, stored in the memory, to receive the product related data from

11   the user through a communication link coupled between [[a]] <u>the</u> data processing

12   system of the user and the data receiving module;

13   a filter service module, stored in the memory, to (i) receive <u>the</u> one or more product

14   attributes and (ii) identify one or more of the product configurations stored in the

15   database that each include the one or more product attributes, if the product

16   related data represents the one or more product attributes;

17   a configuration service module, stored in the memory, to (i) receive a product identifier

18   and to (ii) identify each combination of attributes stored in the database that

19   corresponds to the product identifier, if the product related data represents the

20   product identifier; and

21   a presentation module, stored in the memory, to (i) provide each identified product

22   configuration as a product selection to the user via the communication link if the

23   product related data represents the one or more product attributes and (ii) provide

24   one or more product selections to the user via the communication link, wherein, if

25   the product related data represents the product identifier, each product selection

26   represents a product identifier and a respective combination of attributes

27   identified as corresponding to the product identifier.

1   2.   (Currently Amended)   The computer system of claim [[1]] 75 wherein the

2   ~~product configurations~~ <u>products stored in the memory</u> are <u>represented by</u> pre-generated

3   product configurations, the computer system further comprising:

4   a software configuration engine stored in the memory to generate the pre-generated

5   product configurations.

1   3.   (Previously Presented)   The computer system of claim 1 wherein the data

2   receiving module is further configured to receive data indicating a user selected product,

3   wherein the selected product corresponds to one of the identified product configurations, and

4   the data receiving module is further configured to receive product configuration selections

5   from the user to further configure the selected product, the computer system further

6   comprising:

7   a software configuration engine, stored in the memory, to generate configured product

8   data corresponding to the product configuration selections associated with the

9   selected product and in accordance with the product configuration information;

10   and

11   wherein the presentation module is further configured to present the configured product

12   data to the user via the communication link.

13   4.   (Currently Amended) The computer system of claim 1 wherein the ~~product~~

14   ~~configurations~~ products stored in the memory are represented by pre-generated product

15   configurations, the system further comprising a needs analysis module, stored in the memory,

16   to (i) process the received product related data and (ii) determine which of the service

17   modules to provide the product related data, wherein:

18   said filter service module is further configured to provide a product identifier to said

19   needs analysis module in response to one or more product attributes received from

20   said needs analysis module,

21   said product identifier identifies a pre-generated product configuration, and

22   said each of the one or more product attributes is an attribute of said pre-generated

23   product configuration.

1   5.   (Previously Presented)   The computer system of claim 4, wherein

2   said filter service module is further configured to use said to retrieve said product

3   identifier from said database.

1   6.   (Previously Presented)   The computer system of claim 1, wherein said

2   database contains product identifier information that identifies each product configuration and

3   reference data that links the one or more product attributes to a product configuration.

1   7.   (Currently Amended)   The computer system of claim 6, wherein the

2   ~~product configurations~~ products stored in the memory are represented by pre-generated

3   product configurations and said database comprises:

4   a configuration table storing the pre-generated product configurations; and

5   an attribute table storing the one or more product attributes.

1   8.   (Previously Presented)   The computer system of claim 7, wherein said

2   configuration table contains said product identifier.

1   9.   (Previously Presented)   The computer system of claim 7, wherein the

2   product configurations are pre-generated product configurations and

3   said attribute table comprises an attribute record comprising an attribute field containing

4   said one or more product attributes, and an intersection field containing a

5   reference to at least one of the pre-generated product configurations, and

6   said configuration table comprises a configuration record comprising a configuration

7   field containing said pre-generated product configurations~~,~~ and an identifier field

8   containing said product identifier.

1   10.   (Previously Presented)   The computer system of claim 9, wherein

2   each pre-generated product configuration describes a configuration of a product that is an

3   allowable product configuration in accordance with product rules governing

4   allowable combinations of product attributes,

5   said attribute information describes an attribute of said product, and

6   said pre-generated product configuration of said product includes said one or more

7   product attributes.

1   11.   (Previously Presented)   The computer system of claim 9, the system further

2   comprising a needs analysis module, stored in the memory, to (i) process the received product

3   related data and (ii) determine which of the service modules to provide the product related

4   data, wherein

5   said needs analysis module is configured to access said product configuration information

6   through said filter service.

1   12.   (Previously Presented)   The computer system of claim 9, wherein

2   said reference allows said filter service module to access said configuration record by

3   virtue of said filter service module being configured to access said attribute record

4   using said one or more product attributes.

5

1   13.   (Previously Presented)   The computer system of claim 1, the system further

2   comprising a needs analysis module, stored in the memory, to (i) process the received product

3   related data and (ii) determine which of the service modules to provide the product related

4   data, and wherein said needs analysis module is configured to permit identification of at least

5   one of the product configurations based on the product identifier.

1   14.   (Canceled).

1   15.   (Previously Presented)   The computer system of claim 1, the system further

2   comprising a needs analysis module, stored in the memory, to (i) process the received product

3   related data and (ii) determine which of the service modules to provide the product related

4   data, and wherein said configuration service module is configured to provide a configuration

5   list to said needs analysis module in response to a product identifier received from said needs

6   analysis module.

1   16.   (Previously Presented)   The computer system of claim 15, wherein

2   said configuration list is a list of the available product attributes of said product.

1   17.   (Previously Presented)   The computer system of claim 15, wherein

2   said configuration list is a list of configurations of said product.

1   18.   (Previously Presented)   The computer system of claim 15, wherein

2   said configuration service is configured to use said product identifier to generate said

3   configuration list from information stored in said database.

1   19.   (Previously Presented)   The computer system of claim 1, wherein

2   said database contains product identifier information.

1   20.   (Previously Presented)   The computer system of claim 19, wherein said
2   database comprises:
3   a configuration table containing said product identifier and said product configuration
4   information.

1   21.   (Previously Presented)   The computer system of claim 20, the system
2   further comprising a needs analysis module, stored in the memory, to (i) process the received
3   product related data and (ii) determine which of the service modules to provide the product
4   related data, and wherein
5   said needs analysis module is configured to access said product configuration information
6   through said product identifier to said configuration service module, and
7   said configuration service module is configured to access said database by virtue of being
8   configured to access said database using said product identifier.

1   22.   (Previously Presented)   The computer system of claim 20, wherein the
2   product configurations are pre-generated product configurations and said configuration
3   table comprises a configuration record comprising
4   a configuration field containing said pre-generated product configurations, and
5   an identifier field containing said product identifier.

1   23.   (Previously Presented)   The computer system of claim 22, wherein
2   said pre-generated product configurations describe a product previously configured and
3   saved by the user, and
4   said product identifier identifies said configuration of said product.

1   24.   (Currently Amended)   ~~A computer program product encoded in a~~ The
2   computer readable medium <u>of claim 77</u>~~, the computer program product comprising code~~
3   ~~executable on a computer system to provide one or more product selections to a user in~~
4   ~~accordance with product related data provided by the user,~~ <u>wherein the product features</u>
5   <u>comprise product attributes and</u> the code ~~comprising instructions~~ <u>is further configured to</u>
6   <u>cause the processor</u> to:

7   receive the product related data from the user through a communication link coupled

8   between [[a]] the data processing system of the user and the computer system;

9   access a database storing product configuration information, wherein the product

10   configuration information comprises product identifier information corresponding

11   to product attribute information for the multiple product configurations;

12   receive one or more product attributes and identify one or more product configurations

13   stored in the database that each include the one or more product attributes, if the

14   product related data represents the one or more product attributes;

15   receive a product identifier and identify each combination of attributes stored in the

16   database that corresponds to the product identifier, if the product related data

17   represents the product identifier, if the product related data represents the product

18   identifier;

19   provide each identified product configuration as a product selection to the user via the

20   communication link if the product related data represents the one or more product

21   attributes; and

22   provide one or more product selections to the user via the communication link, wherein,

23   if the product related data represents the product identifier, each product selection

24   represents a product identifier and a respective combination of attributes

25   identified as corresponding to the product identifier.

26   25.   Canceled.

1   26.   (Previously Presented)   The computer program product of claim 24,

2   wherein the code further comprises code to:

3   receive data indicating a user selected product, wherein the selected product corresponds

4   to one of the product selections;

5   receive product configuration selections from the user to further configure the selected

6   product;

7   generate configured product data corresponding to the product configuration selections

8   associated with the selected product and in accordance with product rules stored

9   in a memory that govern allowable combinations of the product features; and

10   provide the configured product data to the user via the communication link.

27.   (Currently Amended)   The computer program product of claim 26, wherein the ~~product configurations~~ products stored in the memory are represented by pre-generated product configurations and said product identifier identifies ~~a~~ at least one of the pre-generated product configurations, and

said each of said one or more attributes is an attribute of said product.

28.   (Previously Presented)   The computer program product of claim 27, wherein the code further comprises code to:

use each of said one or more attributes to retrieve said product identifier from said database.

29.   (Currently Amended)   The computer program product of claim 26 wherein the ~~product configurations~~ products stored in the memory are represented by pre-generated product configurations and the computer program product further comprises a data structure, the data structure comprising information resident in said database, the information comprising:

product identifiers associated with each pre-generated product configuration and

reference data that links the one or more product attributes to each pre-generated product configuration.

30.   (Currently Amended)   The computer program product of claim 29, wherein the ~~product configurations~~ products stored in the memory are represented by pre-generated product configurations and said data structure further comprises:

a configuration table storing the pre-generated product configurations, and

an attribute table to store one or more product attributes.

31.   (Previously Presented)   The computer program product of claim 30, wherein

said configuration table contains said product identifier said attribute table contains said one or more attributes.

32.   (Currently Amended)   The computer program product of claim 30, wherein the ~~product configurations~~ products stored in the memory are represented by pre-

3   generated product configurations and

4   said attribute table comprises an attribute record comprising an attribute field containing

5   said one or more product attributes, and an intersection field containing a

6   reference to at least one of the pre-generated product configurations, and

7   said configuration table comprises a configuration record comprising a configuration

8   field containing said pre-generated product configurations, and an identifier field

9   containing said product identifier.

1   33.   (Previously Presented)   The computer program product of claim 32,

2   wherein each pre-generated product configuration describes a configuration of a product that

3   is an allowable product configuration in accordance with product rules governing allowable

4   combinations of product attributes;

5   said attribute information describes an attribute of said product, and

6   said pre-generated product configuration of said product includes said one or more

7   product attributes.

1   34.   (Previously Presented)   The computer program product of claim 32,

2   wherein the code further comprises code to:

3   access said product identifier information using said attribute information.

1   35.   (Previously Presented)   The computer program product of claim 32,

2   wherein

3   said reference allows the code to access said configuration record by accessing said

4   attribute record using said one or more product attributes.

1   36.   (Canceled).

1   37.   (Previously Presented)   The computer program product of claim 24,

2   wherein said code further comprises code to permit identification of a product configuration

3   based on the product identifier.

1   38.   (Canceled).

1   39.   (Previously Presented)   The computer program product of claim 24,

2 wherein the code further comprises a needs analysis module.

1   40. (Previously Presented) The computer program product of claim 39,
2 wherein said code further comprises code to:
3   provide a configuration list to said needs analysis module in response to the product
4   identifier received from said needs analysis module.

1   41. (Previously Presented) The computer program product of claim 40,
2 wherein
3   said configuration list is a list of the available product attributes of said product.

1   42. (Previously Presented) The computer program product of claim 40,
2 wherein said configuration list is a list of configurations of said product.

1   43. (Previously Presented) The computer program product of claim 40,
2 wherein said code further comprises code to:
3   use said product identifier to generate said configuration list from information stored in
4   said database.

1   44. (Canceled).

1   45. (Previously Presented) The computer program product of claim 29,
2 wherein said data structure further comprises:
3   a configuration table containing said product identifier.

1   46. (Previously Presented) The computer program product of claim 45,
2 wherein said code further comprises code to:
3   access said product configuration information by virtue of supplying said product
4   identifier to a configuration service, and
5   access said database by virtue of being configured to access said database using said
6   product identifier.

1   47. (Previously Presented) The computer program product of claim 45,
2 wherein
3   said configuration table comprises a configuration record comprising a configuration

4   field containing said pre-generated product configurations, and an identifier field
5   containing said product identifier.

1   48.   (Previously Presented)   The computer program product of claim 47,
2   wherein
3   said product configuration information describes a configuration of said product that is an
4   allowable product configuration in accordance with product rules governing
5   allowable combinations of product attributes, and
6   said product identifier information identifies said pre-generated configuration of said
7   product.

1   49.   (Canceled).

1   50.   (Canceled).

1   51.   (Currently Amended)   ~~A method to provide one or more product selections~~
2   ~~to a user in accordance with product related data provided by the user, the~~ The method of
3   claim 79 wherein the memory includes a database to store the products as product
4   configuration information and the product features comprise product attributes and:
5   ~~comprising:~~
6   receiving the product related data from the user via a data processing system comprises:
7   receiving the product related data from the user through a communication link
8   coupled between [[a]] the data processing system ~~of the user~~ and the
9   computer system;
10   ~~processing the received product related data using resources of the computer~~
11   ~~system;~~
12   receiving one or more product attributes and identifying one or more product
13   configurations stored in [[a]] the database that each include the one or
14   more product attributes, if the product related data represents the one or
15   more product attributes;
16   receiving a product identifier and identifying each combination of attributes
17   stored in the database that corresponds to the product identifier, if the
18   product related data represents the product identifier, if the product related

19   data represents the product identifier;

20   providing each identified product configuration as a product selection to the user via the

21   communication link if the product related data represents the one or more product

22   attributes; and

23   providing one or more product selections to the user via the communication link,

24   wherein, if the product related data represents the product identifier, each product

25   selection represents a product identifier and a respective combination of attributes

26   identified as corresponding to the product identifier.

1   52.   (Currently Amended)   The method of claim 51, wherein the ~~product~~

2 ~~configurations~~ <u>products stored in the memory</u> are <u>represented by</u> pre-generated product

3 configurations and

4   said product identifier information identifies pre-generated product configurations, and

5   each of said pre-generated product configuration represents a product having one or more

6   of the attributes.

1   53.   (Previously Presented)   The method of claim 52, further comprising:

2   causing a needs analysis module to provide said one or more attributes to a filter service;

3   and

4   causing said filter service to return said product identifier to said needs analysis module.

1   54.   (Currently Amended)   The method of claim 51, wherein the ~~product~~

2 ~~configurations~~ <u>products stored in the memory</u> are <u>represented by</u> pre-generated product

3 configurations, the method further comprising: querying a database of said computer system,

4 wherein querying said database comprises:

5   accessing an attribute table of said database using said one or more attributes;

6   identifying at least one database record comprising the product identifier and said

7   attribute information; and

8   accessing said said database record to identify a pre-generated product

9   configuration associated with said one or more attributes.

1   55.   (Previously Presented)   The method of claim 54, wherein

2   said product identifier is associated with said pre-generated product configurations, and

3   each of said pre-generated product configurations represents a product having said one or

4   more attributes.

1   56.   (Previously Presented)   The method of claim 55, wherein

2   a configuration table comprises said pre-generated product configurations.

1   57.   (Previously Presented)   The method of claim 51 further comprising:

2   providing said product identifier to a configuration service;

3   identifying said product configuration corresponding to said product identifier by causing

4   said configuration service to query a database using said product identifier; and

5   causing said configuration service to return said identified product configuration.

1   58.   (Currently Amended)   The method of claim 57, wherein the ~~product~~

2 ~~configurations~~ products stored in the memory are represented by pre-generated product

3 configurations and said product identifier is associated with a pre-generated product

4 configuration in said database.

1   59.   (Previously Presented)   The method of claim 58, further comprising:

2   causing a needs analysis module to provide said product identifier to said configuration

3   service; and

4   causing said configuration service to return said pre-generated product configuration to

5   said needs analysis module.

1   60.   (Currently Amended)   The method of claim 57, wherein the ~~product~~

2 ~~configurations~~ products stored in the memory are represented by pre-generated product

3 configurations and said querying said database comprises:

4   accessing a configuration table of said database using said product identifier to identify

5   said pre-generated product configuration.

1   61.   (Previously Presented)   The method of claim 60, wherein

2   each of said pre-generated product are associated with said product identifier.

1   62.   (Previously Presented)   The method of claim 51 further comprising:

2   receiving data indicating a user selected product, wherein the selected product

3   corresponds to one of the identified product configurations;

4   receiving product configuration selections from the user to further configure the selected

5   product;

6   generating configured product data corresponding to the product configuration selections

7   associated with the selected product and in accordance with the product

8   configuration information; and

9   providing the configured product data to the user via the communication link.

1   63.   (Canceled).

1   64.   (Previously Presented)   The method of claim 51, wherein said product

2 related data includes data related to a vehicle.

1   65.   (Previously Presented)   The method of claim 64, wherein said product

2 selections comprise a make of said vehicle.

1   66.   (Previously Presented)   The method of claim 64, wherein said product

2 selections comprise a model of said vehicle.

1   67.   (Previously Presented)   The method of claim 64, wherein said product

2 selections comprise a trim level of said vehicle.

1   68.   (Previously Presented)   The method of claim 64, wherein said product

2 selections comprise an equipment level of said vehicle.

1   69.   (Previously Presented)   The method of claim 64, wherein said product

2 selections comprise one of a price range, a vehicle type, an engine type, a fuel economy, an

3 interior feature and a safety feature.

1   70.   (Currently Amended) ~~An apparatus to provide one or more product selections~~

2 ~~to a user in accordance with product related data provided by the user, the apparatus~~

3 ~~comprising:~~ The apparatus of claim 81 further comprising:

4   means for receiving the product related data from the user through a communication link

5   coupled between [[a]] the data processing system of the user and the computer

6   system;

7	means for processing the received product related data using resources of the computer
8	system;
9	means for receiving one or more product attributes and identifying one or more pre-
10	generated product configurations stored in a database that each include the one or
11	more product attributes, if the product related data represents the one or more
12	product attributes;
13	means for receiving a product identifier and identifying each combination of attributes
14	stored in the database that corresponds to the product identifier, if the product
15	related represents the product identifier;
16	means for providing each identified pre-generated product configuration as a product
17	selection to the user via the communication link if the product related data
18	represents the one or more product attributes; and
19	means for providing one or more product selections to the user via the communication
20	link, wherein, if the product related data represents the product identifier, each
21	product selection represents a product identifier and a respective combination of
22	attributes identified as corresponding to the product identifier.

1	71. (Previously Presented) The apparatus of claim 70 further comprising:
2	means for receiving data indicating a user selected product, wherein the selected product
3	corresponds to one of the identified pre-generated product configurations;
4	means for receiving product configuration selections from the user to further configure
5	the selected product;
6	means for generating configured product data corresponding to the product configuration
7	selections associated with the selected product and in accordance with the product
8	configuration information; and
9	means for providing the configured product data to the user via the communication link.

| 1 | 72. (Previously Presented) The apparatus of claim 70 wherein the product related |
| 2 | data includes data related to a vehicle. |

| 1 | 73. (Previously Presented) The computer system of claim 1 wherein the product |
| 2 | related data includes data related to a vehicle. |

1   74.   (Previously Presented)   The computer program product of claim 24 wherein the

2 product related data includes data related to a vehicle.

1   75.   (New)   A computer system to provide one or more product selections to a user

2 in accordance with product related data provided by the user, the computer system

3 comprising:

4   a processor coupled to the memory and the database;

5   a memory, coupled to the processor, storing product configuration information for

6   multiple products, wherein the product configuration information includes

7   product features and the memory further comprises code stored therein and

8   executable by the processor to:

9   receive the product related data from the user via a data processing system;

10   identify products stored in the memory based on two different types, (A) and (B),

11   of product identification, wherein the code to identify products based on

12   the two different types of product identification comprises code executable

13   by the processor to:

14   (A)   search for products based on product features included in the

15   product related data, if the product related data represents

16   the one or more product features; and

17   identify one or more products stored in the memory that each

18   include the one or more features, if the product related data

19   represents the one or more product features; and

20   (B)   identify one or more products stored in the memory that are

21   identified by a product model identifier, if the product

22   related data represents the product model identifier; and

23   provide identified products to the user for display by the data processing system

24   of the user.

1   76.   (New)   The computer system of claim 75 wherein the code to identify one or

2 more products stored in the memory that are identified by a product model identifier, if the

3 product related data represents the product model identifier further comprises code to identify

4   one or more products stored in the memory that are identified by a product model identifier

5   and product features, if the product related data represents the product model identifier and

6   product features selected by the user.

1   77.   (New) A computer readable medium comprising product configuration

2   information for multiple products stored in the computer readable medium, wherein the

3   product configuration information includes product features and the computer readable

4   medium further comprises code stored therein to provide one or more product selections to a

5   user in accordance with product related data provided by the user, wherein the code is

6   executable by a processor to

7   receive the product related data from the user via a data processing system;

8   identify products stored in the memory based on two different types, (A) and (B), of

9   product identification, wherein the code to identify products based on two

10   different types of product identification comprises code executable by the

11   processor to:

12   (A)   search for products based on product features included in the product

13   related data if the product related data represents the one or

14   more product features; and

15   identify one or more products stored in the memory that each include

16   the one or more features, if the product related data represents

17   the one or more product features; and

18   (B)   identify one or more products stored in the memory that are identified

19   by a product model identifier, if the product related data

20   represents the product model identifier; and

21   provide identified products to the user for display by the data processing system of the

22   user.

1   78.   (New) The computer readable medium of claim 77 wherein the code to

2   identify one or more products stored in the memory that are identified by a product model

3   identifier, if the product related data represents the product model identifier further comprises

4   code to identify one or more products stored in the memory that are identified by a product

5   model identifier and product features, if the product related data represents the product model

6   identifier and product features selected by the user.

1   79.   (New) A method of using a computer system to provide one or more product

2   selections to a user in accordance with product related data provided by the user, the method

3   comprising:

4   receiving the product related data from the user via a data processing system;

5   identifying products stored in a memory based on two different types, (A) and (B), of

6   product identification, wherein the memory stores product configuration

7   information for multiple products, the product configuration information

8   includes product features, and the two different types of product identification

9   comprise:

10   (A)   searching for products in the memory based on product features included

11   in the product related data if the product related data represents

12   the one or more product features; and

13   identifying one or more products stored in the memory that each include

14   the one or more features, if the product related data represents

15   the one or more product features; and

16   (B)   identifying one or more products stored in the memory that are identified

17   by a product model identifier, if the product related data

18   represents the product model identifier; and

19   providing identified products to the user for display by the data processing system of

20   the user.

1   80.   The method of claim 79 wherein identifying one or more products stored in the

2   memory that are identified by a product model identifier, if the product related data represents

3   the product model identifier further comprises identify one or more products stored in the

4   memory that are identified by a product model identifier and product features, if the product

5   related data represents the product model identifier and product features selected by the user.

1   81.   (New) An apparatus to provide one or more product selections to a user in

2 accordance with product related data provided by the user, the apparatus comprising:

3   means for receiving the product related data from the user via a data processing

4   system;

5   means for identifying products stored in a memory based on two different means, (A)

6   and (B), for product identification, wherein the memory stores product

7   configuration information for multiple products, the product configuration

8   information includes product features, and the two different means for product

9   identification comprise:

10   (A)   means for searching for products in the memory based on product

11   features included in the product related data if the product related

12   data represents the one or more product features; and

13   means for identifying one or more products stored in the memory that

14   each include the one or more features, if the product related data

15   represents the one or more product features; and

16   (B)   means for identifying one or more products stored in the memory that

17   are identified by a product model identifier, if the product related

18   data represents the product model identifier; and

19   means for providing identified products to the user for display by the data processing

20   system of the user.